

I

A. Intermediates & Chemicals

POLYVINYL ALCOHOL

Source: Nikkan Kogyo Shimban, Tokyo - 2/13/53

Polyvinyl alcohol has hitherto been used as raw material of vinylon. Prof. Oda of Kyoto University has recently started further research to get gunpowder from polyvinyl. This epoch-making scheme of his is stirring keen interest in various circles.

PARA AMINORENZOIC ACID OUTPUT EXPANDED BY LEMKE

Source: Oil, Paint and Drug Reporter - 3/9/53, pg. 69

B. L. Lemke and Company, Lodi, N. J. has installed a new unit which has quadrupled its production of para-aminobenzoic acid U.S.P. and other PABA derivatives. Production economies are reflected in a price reduction of 50 cents per pound which makes the pharmaceutical grade now available at \$2.50 per pound in 1,000 pound quantities. Prices of PABA salts have been reduced accordingly. Improved production methods and continuous operation have also resulted in higher purity and greater uniformity.

BENZOL, TOLUOL OUTPUT RISE DUE FROM NEW SHELL PLANT

Source: Oil, Paint and Drug Reporter - 3/16/53, Pg.5

A multi-million dollar integrated "platforming" and aromatics extractive distillation plant, which will add about 10 per cent to the domestic output of benzol plus a large volume of toluol, has been put on stream at its Houston, Texas refinery, the Shell Oil Company has announced.

Yearly output will exceed 19,000,000 gallons of benzol and 33,000,000 gallons of toluol. Aromatic and non-aromatic by-products of the plant are blended into aviation gasoline, motor gasoline and special products.

ESTIMATED U. S. ANILINE CONSUMPTION IN 1956

Source: Chemical Week - 3/14/53, pg. 66

<u>End Use</u>	<u>Millions of Pounds</u>	<u>% of Total</u>
Rubber Chemicals	80	61.5
Dyes and Intermediates	20	15.5
Drugs	5	3.7
Veterinary Pharmaceuticals	9	7.0
Photo Chemicals	3	2.3
Other	13	10.0
Total	130	100.0

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NEW BROMINATING AGENT AVAILABLE

Source: Journal of Commerce - 3/6/53

A new brominating and oxidizing agent is now being produced in commercial quantities, it has been announced.

It is Brom 55 (Dibromo Dimethyl Hydantoin), which is expected to replace other bromine carriers and make its use practical in certain applications now using liquid bromine, the company said.

The chemical department of McKesson & Robbins, Inc. has been appointed exclusive distributor for the new product, which is produced by the Bromine Producers Company, recently organized by Great Lakes Oil and Chemical Company and Drug Research, Inc.

Brom 55 is a crystalline powder, containing 55 per cent bromine combined with an organic carrier. The bromine can be released under strict control to achieve a desired reaction and minimize side reactions, thereby increasing yields in many organic synthesis.

CITRAZINIC ACID

Source: Chemical and Engineering News - 3/2/53, Pg. 941

Citrazinic acid, a polyfunctional pyridine compound, is currently being offered in trial quantities by Chas. Pfizer and Company, Inc.

A white-to-buff colored organic acid, the product is 2,6-dehydroxyisonicotinic acid. CZA, as it is known, has a molecular grouping that makes possible many chemical reactions, as well as the economical synthesis of new classes of substituted pyridines, according to Pfizer.

CHLOROACETALDEHYDE

Source: Chemical Engineering - March 1952, pg. 113

Dow Chemical has started commercial production of chloroacetaldehyde at its Midland, Michigan plant. It is being shipped as a 40 per cent aqueous solution.

Chloroacetaldehyde, a highly reactive compound, undergoes most of the typical aldehydic reactions. Likely markets are in fumigants and pharmaceuticals.

FURFURYLAMINE

Source: Chemical Engineering - March 1953, pg. 268

A highly reactive heterocyclic compound is being offered for evaluation by Commercial Solvents Corp. It is the chemical intermediate, furfurylamine (2-furamethylamine).

A straw-colored liquid, it undergoes reactions typical of the primary amines. It forms salts easily, can be reduced to tetrahydrofurfurylamine, can be reacted with nitrohydroxy compounds to produce nitro amines.

FURFURYLAMINE - (Cont'd.)

Dithiocarbamic acid derivatives of furfurylamine are said to be useful rubber accelerators. In general, furfurylamine's chemical and physical properties suggest application in the synthesis of dyestuffs, pharmaceutical, rubber and petroleum additives.

I
B. Dyes and Pigments

NATIONAL ANILINE EXPANSION

Source: Chemical Week - 3/7/53, pg. 30

National Aniline Division of Allied Chemical and Dye Corporation has started construction on a \$1.2 million building at its Buffalo plant for manufacture of intermediates used in making dyestuffs. The building is the fourth erected for dyestuffs manufacturing in recent years.

The new unit will be completed late this year.

RESEARCH EXPANSION

Source: Chemical Week - 3/14/53, pg. 36

The National Aniline Division of Allied Chemical and Dye Corp. has blueprints for a new \$2.8 million research and engineering building at Buffalo, New York.

Slated for occupancy by 1954, the proposed laboratories will provide National Aniline with 85,000 square feet of floor space for resin, dyestuff, synthetic detergent, and general organic research.

CANADIAN DYESTUFF COMPETITION

Source: Chemical Week - 3/14/53, Pg. 61

U. S. dyestuff exporters may face some Canadian competition. Two companies - one German, one British - are now surveying eastern Canada for likely dye plant sites.

If and when a plant is set up, it will be the first Canadian dyestuff enterprise of any consequence.

CREATE NEW RAYON FINISHING PROCESS

Source: Journal of Commerce - 3/3/53

A new finishing process that renders direct dyed viscose rayon fabrics completely washable has been announced by the Aquex Development and Sales Corp.

CPYRGHT

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CREATE NEW RAYON FINISHING PROCESS (Cont'd)

of Whippany, New Jersey and the Sandoz Chemicals Works. Process patents have been applied for in this new development, and the Aquex Corporation is drawing up licensing agreements for its use.

Besides complete washability, the new process imparts these consumer features: (1) excellent dimensional stability, with low residual shrinking and no progressive shrinkage on repeated launderings; (2) excellent color fastness (as tested by A.A.T.C.C. Wash Test No. 3)--no color bleeding in home washing machines or in commercial laundries; excellent fastness to light, using direct dyes instead of vats; (3) excellent retention of physical properties--tensile strength and flex abrasion resistance.

At the same time, it was stated that the process will be welcomed by the textile trade because of these characteristics; (1) ease of production--use of standard finishing equipment and excellent bath life; (2) production of heavy and medium shades without the expense of vat dyeing.

JAPAN TO PRODUCE TITANIUM DIOXIDE

Source: Journal of Commerce - 3/31/53

Initial production of the several modern grades of titanium dioxide will begin in Japan in late 1953, according to a joint announcement made by Eiyo Fujise, president of Nippon Titanium Company in Tokyo and Dr. R. S. Aries, president of R. S. Aries and Associates, New York.

The new plant is already being built and will have a capacity of 150 tons per month of the several varieties of the pure white pigment by the end of 1953.

According to Mr. Fujise, expansion to double this production is planned within the next year; and continuing expansion in both the quantity and the varieties of material produced are programmed for the immediate future.

I

C. Pharmaceuticals

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ANTIMALARIAL

Source: Chemical Week - 3/14/53, pg. 42

Army medics are testing Burroughs, Wellcome and Co.'s new antimalarial, ~~Baroprim~~, on soldier patients at Fort Knox Hospital. The drug -- a substituted pyrimidine -- has already been introduced in England and will be tried for six months at the Kentucky station.

NEW TB DRUG LAUDED BY 70 SWISS SPECIALISTS

Source: Journal of Commerce - 3/18/53

A team of 70 Swiss tuberculosis specialists today termed "Rimifon", a

NEW TB DRUG LAUDED BY 70 SWISS SPECIALISTS (cont'd)

new anti-tuberculosis preparation, one of the most efficient weapons yet discovered to combat the disease.

"In some respects, Rimifon is superior to all the known antitubercule medicaments - in others it is their equal", they said in a statement.

"It does not, however, make a stay in a sanatorium unnecessary, nor does it cause complete healing in every case, but it contributes substantially to the healing process", it added.

Supplies of Rimifon were placed at their disposal by the manufacturers (Hoffman-La Roche of Basle) in whose laboratories it was developed last year.

ID. Plastics, Resins and RubberDOW ANNOUNCES ENTRY INTO POLYETHYLENE FIELD

Source: Oil, Paint and Drug Reporter - 3/23/53, pg. 5

Dow Chemical Co., Midland Michigan is planning to enter the production field of polyethylene. Negotiations for patent licenses and technical knowledge have been made with Imperial Chemical Industries, Ltd., according to the announcement. The Texas division of Dow Chemical at Freeport, Texas will construct plant facilities. Start up of polyethylene production is expected in eighteen to twenty-four months.

ION RESIN

Source: Nikkan Kogyo Shimbun, Tokyo, 2/16/53

Shohi Kogyo is now having a negotiation with Dow Chemical for import of 'ion Resin' and the negotiation is expected to be materialized soon.

MELAMINE - TREATED PAPERS

Source: Chemical and Engineering News - 3/2/53, pg. 873

The use aluminum chloride in the production of high wet-strength melamine-treated papers was outlined by F. W. Boughton and K. J. Mackenzie of Eastman Kodak. In the manufacture of these papers, definite advantages have been obtained in the use of aluminum chloride in place of aluminum sulfate. Although the price of aluminum chloride is several times greater than that of aluminum sulfate, a considerable savings in paper manufacturing costs may be realized by its use. The chloride greatly reduces the amount of melamine resin necessary to achieve the desired wet strength. While an aluminum sulfate formulation, producing paper with a wet burst of 8, uses 3.5% melamine resin, a comparable wet strength may be realized with only 0.5% resin when aluminum chloride is used.

NEW TEXTILE RESIN

Source: Journal of Commerce - 3/13/53

Water-spotting on loom-finished taffetas is said to have been eliminated successfully with the introduction of Stymer LF, a new, durable size for solution-dyed filament acetate, Monsanto Chemical Co. announced.

R. T. Clark, manager of the textile chemicals department, reported that the new chemical was not only non-spotting but also was easy to handle, and that it demonstrated excellent operating performance characteristics and contributed to durability of hand.

Stymer LF is a resin made soluble by ammonium hydroxide.

RUBBER CONSUMPTION - FEBRUARY

Source: The Rubber Manufacturers Association - 3/20/53

New rubber consumption during the month of February decreased 7.4% to 111,496 long tons from the 120,404 long tons consumed in January, according to the monthly report of the Rubber Manufacturers Association, Inc.

Consumption of natural rubber during February decreased 10.54% to 42,462 long tons from the 47,466 long tons used during January. Use of synthetic rubber amounted to 69,034 long tons, a decrease of 5.3% from previous month's total of 72,938 long tons.

Consumption of reclaimed rubber by the industry was estimated at 24,083 long tons, 4.41% lower than the 25,194 long tons used during January.

TOUGHENS SYNTHETIC RUBBER

Source: Wall Street Journal - 3/16/53

A new triple-jet mixing process is enabling Copolymer Corp. to manufacture what it claims is a tougher, longer-wearing and cheaper form of "GR-S" cold synthetic rubber.

Labeled "Carbex", the new synthetic's efficiency results from a more thorough mixing of "GR-S" with carbon black--the rubber industry's "toughening agent".

In split-second timing, a three-way jet nozzle spews out liquid "GR-S", squirts into it a churned-up mixture of carbon black and water, and then whirls them together in a blast of high pressure steam.

This results in a tougher product at a reduction in both initial and processing costs, according to Col. C. M. Hullings, operating vice-president of Copolymer Corp.

In addition, tires made of "carbex" last "at least 20% longer under the same road conditions" than those made of conventional "GR-S", the manufacturer claims.

CPYRGHT

I
E. MiscellaneousCLEAN AND WHITE

Source: Chemical and Engineering News - 3/30/53, pg. 1263

Purex Corp., South Gate, Calif., announces that it has been able to combine a bleach and synthetic detergent through a spray drying process. The product consists of calcium hypochlorite and sodium tripolyphosphate to which a detergent is added. A company official states, that this will be the first heavy-duty, dry bleach-detergent combination available on a national scale. The product is a natural for Purex which has been manufacturing household bleaches for 28 years, starting its first production in a bathtub.

RINSO PARTNER

Source: Chemical Week - 3/7/53, pg. 71

Rinso Sunlight Detergent has been introduced by Lever Brothers to sell as a companion product to its well-known Rinso granulated soap. Marketing is already under way in the Kansas City area. Rinso, as a soap, will be continued. But the firm says it believes there are some jobs synthetics do better, so it plans to supply the housewife with such a product, one with a name she's familiar with. The detergent Rinso also contains Solium.

CHEMICAL EXPANSION - 1952

Source: Chemical Week - 3/28/53, pg. 11

Chemical expansion last year was phenomenal - a resounding \$1,451 million was invested in new plant and equipment. But this year, says the U. S. Department of Commerce, last year's topper will be topped by another 8%, and total outlay is estimated at \$1.571 million. Industry as a whole plans a 2% increase; and thus the chemical segment is out in front four times over.

This is quite a different picture from that painted by an earlier survey three months ago. Then it appeared that chemical investment would fall 4%, and that over-all industrial investment would show a precipitous drop. The change from dark to light underscores industry's basic, confident optimism for the years ahead.

DYNEL

Source: Chemical Week - 3/28/53, pg. 18

Union Carbide and Carbon has declared it will definitely start construction, possibly by late summer, on a \$30 million plant at Leakesville, N. C. to produce dynel fiber.

"Technical difficulties" with the fiber make up the only "roadblock", and the company has "absolutely no intention" of abandoning the project.

The site for the proposed plant was selected last year.

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TITANIUM

Source: Chemical Week - 3/28/53, pg. 18

Crane Company is reported to be looking for a site for a 6,000-ton/year titanium plant to cost around \$20 million. One site, near Nashville, Tenn., is under consideration, but action by the Tennessee legislature must precede operation by Crane. Financing plans are as yet incomplete.

MAY PREVENT FRUIT ROTTING

Source: Wall Street Journal - 3/18/53

A series of new chemicals that are expected to reduce mold and rot in fruits during shipments have been found by a research team at Purdue University, working under grants from the University and from the A & P Food Stores.

The chemicals are tri-chloro-ethylene and tetra-chloro-ethylene. Tests show that they are effective in preventing spoilage in strawberries and brown rot in peaches.

Treatment is given by fumigating the fruits with vapors from the chemicals. These vapors, the researchers say, leave no injurious residue.

II

New Products and Types Approved for Manufacturing

06560-01	Ultramarine Blue 59-5650
06371-01	Ultramarine Blue 59-3600
16030-03	Calcocid Phloxine BN
16101-04	Calcocid Milling Red BF Ex. Conc.
08368-03	Solubilized Enheptin
08256-05	Sulfacetamide Micro Crystals
02568-01	Crude Di Tertiary Butyl p-Cresol
45003-06	Calcodur Orange ERD (Stilbene Orange ERD 88%)
05232-02	Calconyl Orange R 40% Solution
05232-01	Calconyl Orange R 20% Solution
05233-01	Calconyl Orange R Powder
44027-01	Calcomine Green 2G Conc.
16120-06	Calcofast Wool Pink N
16094-01	Neutral Red GD 100%

III

Calco's Publication Committee Approvals

1. "Observations on Optical Properties of Pigmented Films" by R. H. Kienle and C. Maresh. Paper to be presented before the Oil and Colour Chemists' Association Conference to be held at Eastbourne, England, June 2-6, 1953. The paper will be published in the Journal of the Oil and Colour Chemists' Association.
2. "Analogues of Pteroylglutamic Acid. IX" by Cosulich, et al. For publication in the Journal of the American Chemical Society.
3. "Disposal of Chemical Wastes" by William Rohrhurst. To be presented before the Greater New York Safety Council on March 27, 1953.
4. "A Rational Classification for Industrial Wastes" by L. L. Hedgepeth. For presentation at the Florida Sewage and Industrial Wastes Association meeting in Tampa, Florida April 29th, and for offering to "Sewage and Wastes Journal" for publication.